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ABSTRACT

This field test report was completed for a producer of an educational computer software program. The program, designed to help students learn about Canadian history, is outlined. The program simulates the events and atmosphere of the years 1864-1873, formative years in Canada's history; the student user is cast in the role of a journalist on the staff of a newspaper. As the student covers various news stories of the period, decisions concerning day-to-day life, as well as the larger social, economic, and political issues of nation-building are faced. This report discusses various aspects of the software field tests in two eighth grade classrooms (36 students) including descriptions of: the software, field test sites, the sample, procedure, findings, discussions of revisions, and retesting. Both teachers and students were impressed by the program, and students benefitted from using it. Three appendices contain: teacher materials, observer materials, and excerpts from transcribed tapes. (DB)

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A FORMATIVE EVALUATION PLAN OF

The Bartlett Saga, Part III

"United We Stand: Confederation"

1864-1873

Field Testing Conducted and Report Prepared

by

Kathlene R. Willing, M.Ed

Education in Progress

for

Interactive Image Technologies

February 1987

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DESCRIPTION OF SOFTWARE

The third in the Bartlett Saga series of Canadian historical simulations, "United We Stand: Confederation," recreates the excitement and energy which characterized the years of 1864-1873. The student plays the role of a budding journalist on staff at Widow Bartlett Jones' latest newspaper venture, The Ottawa Mirror. As the student covers various news stories of the period, decisions concerning day-to-day life, as well as the larger social, economic and political issues of nation-building will be faced.

The core of the simulation is a sequence of graphics- and text-based scenarios. From the four stories available for coverage in each of the ten years of the simulation, the students must select three as assignments. This selection takes place from a graphic of the interior of The Ottawa Mirror. To ensure a lively variety of issues stories are classified into five desks: the National Desk, the Economy, the City Desk, International Affairs and Social Column.

To assist students in the decision-making required by the scenarios, a dictionary and atlas can be referred to throughout the simulation. An electronic notepad and a bul-

letin board allow the user to record observations and share them with others. An interactive game can be accessed throughout the simulation to provide added challenge, learning and fun.

As the students travel about British North America, interview politicians and cover local news stories, they will gain an understanding of the political, economic, and social dimensions of establishing a nation. The concepts of nationalism and regionalism, the division of federal and provincial powers, and the role of prominent personalities are explored.

The simulation encourages students to interact with history, perceive the circumstances of people in the past, to appreciate the roots of current conflicts in Canadian federalism, and to compare and contrast the past and the present.

FIELD TESTS SITES

Because the basic design of the Bartlett Saga Series has been evaluated in previous field tests of "Refugees in the Wilderness", "The Rebels", and "The Golden West" during Spring, 1986, field testing was limited to two sites with the approval of the Ministry with the understanding that closer analysis of students' discussions would be reported upon. The two sites were: a grade eight in a Senior Public School with the Peel Board and a grade eight in an elementary school with the Metro Separate School Board.

Since both school sites were small networks, a third site, the Software Development Assistance Centre (SDAC) at the Ontario Institute for Studies in Education (OISE), was selected to test for technical problems on a larger network.

The Senior Public, located in Mississauga, has an instructional range of grades six through eight. The school population of approximately 600 students and 30 staff is predominantly Anglo-Saxon with a mixture of Italians, East Europeans, Blacks and East Indians. The families' socio-economic backgrounds are considered middle to high class. The computer lab was located at one end of a multi-purpose room containing about six long tables and benches. On one side

of the room five ICONs were networked to a fileserver which was located in the office with another ICON. On the opposite wall were eight commodore 64s connected to a printer.

The elementary Separate School, including grades JK-eight, is located in Rexdale. The school population, approximately 400 with a staff of about 20, is predominantly of Italian background with a variety of other cultural groups. It is also considererd to be middle class. Observations took place in the library where two ICONs were networked to a fileserver.

SDAC had 15 computers that were operational. They were networked to four fileservers the day the program was field tested for technical problems. The computers were located in several rooms and offices, and on two different floors.

THE SAMPLE

Students

Thirty-six students from the two classrooms were observed using the program -- 18 males and 18 females. Ranging in age from 12 to 15 years of age, 3% were 12 year-olds, 69% were 13, 25% were 14, and 3% were 15. The teachers grouped the students in groups of two, three and four. There were four of each - four two's, four three's and four four's. Six of them were mixed (males and females), and six were segregated (males or females only). The selection and grouping of students was left to the teachers to achieve a mix of sexes, cultures and abilities. One teacher grouped them alphabetically, the other teacher allowed the students to select their own partners with his approval. None of the students had worked as groups previous to the field test.

The socio-economic backgrounds of the students were considered to be from middle to high. Of the students using the program, 44% were from Italian backgrounds, 27% Anglo-Saxon, and the remainder a mixture from Black, Croatian, East Indian, South American, Egyptian, Polish and Yugoslavian backgrounds. The families of two students were recent (two years) immigrants.

Overall, the reading levels of the observed students from both classes were not at grade level. The median was 7.15 and the average 7.3. The median and the average of the females were higher than the males - 7.9 and 7.5 compared to the males' 6.9 and 7.0 respectively. One of the schools is streamed for the Music Programme, therefore the class as a group is in the lower stream. The median reading level of the 14 students who were observed was 6.9 and the average was 6.97. The median and the average of the females were both 7.1, whereas the males' were 6.8 and 6.9 respectively. Although the other school was not streamed, this particular class is also at a lower than expected reading level. The teacher commented that this class generally is a difficult one to motivate. The 22 students who were observed had a median reading level of 8.0 and an average of 7.48. The median of the females was 8.0 and the average 7.75, whereas the males' were 7.5 and 7.15 respectively.

Leadership roles in the mixed groups were varied. Two of the groups with two males and two females were dominated by the males. One group with one male and female took on a democratic style. Although each took turns at the computer and respected each other's reading times, the male tended to explain procedures more often than the female. The other three groups were dominated by the females in spite of the

fact that in two of them the female was outnumbered, 2:1 and 3:1. In one of these a male took on a secondary leadership role.

In both schools, the students have not used the ICONs on a regular basis. The majority of the students are familiar with computers and were quite at ease in using them. Thirty-six percent of the students (28% females and 44% males) have computers at home. The majority of the students, in response to the computer use survey, said they have used a computer for more than one year. Seventeen percent responded that they have used a computer less than one year; 19% responded they have used computers for four and five years.

The students' level of knowledge of the Confederation era was described as good by the teachers. The students at one school had just begun the unit of study one week previous to the field test; the other class was about mid-way in their unit. Students were heard making references to something they had learned in class or from having read the textbook.

Teachers

Two classroom teachers, both males, participated in the

field testing of "United We Stand: Confederation." They have a total of 23 years of teaching experience and are both knowledgeable about computers. One has taken Parts I and II of the Ministry's "Computers in the Classroom." The other has taken Part I.

The Senior Public teacher teaches Core subjects in Language Arts and History, and Phys. Ed. and Health to grade seven and eight students. In his 12 years of teaching, he has also taught Math and Geography as well as grade six. He has a BA in Physical and Health Education and Special Ed, Part I (Gifted Option), along with Computers in the Classroom, Parts I and II.

The Separate School teacher teaches all subjects to the grade eight students. He has been teaching for 11 years and has taught remedial subjects as well as History and Phys Ed. He holds a Specialist in Special Education and has Computers in the Classroom, Part I.

Because the computers were not located in the classroom, both teachers were not present for the observations. They sent selected groups of students to either the lab or the library for the observations and they remained with their class.

PROCEDURE

The field test with the students took place the second week of January. Materials were delivered to participating teachers in person by the primary evaluator the second week in December. Original contact with the teachers, made by phone, occurred in October because it was thought that field testing would occur in November. Therefore from the original point of contact to the teacher interviews, the field test timeframe was longer than usual - 15 weeks. This also includes the two weeks of Christmas Holidays.

The testing at SDAC was done in one morning the week before taking it to the schools. The program was loaded into the ambience and the evaluator operated the program from beginning to end on all the computers. No problems or crashes occurred.

Observations of the two school sites,scheduled for three days within a one week timeframe, took place on the same three days -- one in the morning and the other in the afternoon. Both were also provided with an updated disk of the program which was loaded into the fileservers on the first day of the testing. Because the students' discussions were audio taped, it was necessary each day to set up the audio

equipment at two computers before students arrived, and then were taken down when the students left.

Three different observers were used. The primary evaluator went with an observer on the first day. The remaining two days the other two observers went on their own. All observers are experienced from previous field tests.

The teachers were provided with a package of materials (Appendix A) including a cover letter outlining the contents of the package and dates and times of observations and a preliminary version of the program diskette. The instructions to the teacher (Appendix A, pg. 6-7) outlined how to prepare themselves and their students, and how to organize for the field test observations. They were provided with a printout of the teacher's notes from the program giving them background on the program and ideas for use with the class. Both teachers were instructed to use the program with the entire class. A copy of Appendix D of the Ministry's "Formative Evaluation Plan" was also provided to give background information on what is looked for in a field test. All materials were hand delivered by the field test evaluator for personal contact.

A Fry readability study was done on the program contents using a scenario, dictionary entry, and the tutorial. The

reading level was grade seven.

Data from teachers was gathered by interview and questionnaire. The questionnaire gathered information both about the teachers' backgrounds as well as their students' (Appendix A, pg. 11-12). After the observations each teacher was interviewed using the teacher interview questionnaire (Appendix A, pg. 17). The teacher interviews were taped and transcribed.

Data from the students was acquired by observation, interview using a survey and questionnaire, and audio tapes of their discussions. The audio tapes were transcribed. Of the twelve groups, eight of the tapes were of good quality. Two were completely useless due to background noises and the sound of machinery which made the voices indistinguishable. Two others were only partially useful.

Observations lasted approximately 50 minutes in each school and about 10 minutes was used to interview the students after they used the program. Three people including the evaluator took observation notes on the forms provided (Appendix B). After the observations, the students were interviewed individually to obtain their opinions on the program. They also were given a computer use and attitude survey. These provided the evaluator with information

concerning the sex-equity, gender issues.

Observations at the first site took place in the computer lab on three mornings. The teacher sent five groups of students in from the classroom each period. He remained with his class and was not present to observe. The lab was set aside for our exclusive use. Only the two groups seated at the microphones were observed each day. The computers were arranged in an "L" shape and the microphones were located at the computers at opposite ends. Throughout the three day test, one crash occurred when a student sent something to the printer. The computer, not being used by a group under observation, was rebooted with no further problems. The teacher said the same problem had occurred at another time. It was felt it was a hardware problem at the school and not the program. The students worked in four groups of two and two groups of three. Three of the groups were all males, two of the groups all females, and one a male and female working together. Generally the groups worked well together, with lively discussions and crosstalk occuring between groups. They were interviewed separately after using the program.

Observations at the second site took place in the library where the two ICONs are located with the fileserver. The

library was used by other classes during the three days and the librarian was generally present. As at site one, the teacher sent the students in groups while he remained in the classroom with the rest of the class. The library was often busy with other students coming and going. The two computers were also close to each other. In spite of the closeness and the many distractions, students attended to the program and engaged in lively discussions. And as at site one, there was crosstalk between the groups. The groups were also larger than site one. There were four groups of four, and two groups of three. Five of the groups were mixed and only one group of three consisted of females.

FINDINGS

The Program Concept

The teachers were impressed with "United We Stand: Confederation." They felt it added another dimension to the teaching of the time period. It was especially relevant to the grade eight history programme. One of the teachers commented that students "seemed turned on" to it. He was pleased because many of his students are not history oriented. The other teacher said many of his students, "would rather do their history with it [the computer] than out of a book in class." Students liked the idea of imagining themselves as reporters for a newspaper and interviewing people of the past.

The taped dialogues of the students revealed their delight and the appropriateness of the content. They were heard reading the text aloud and subvocally, and making comments on what they read. They were also heard correcting each other when words were mispronounced and discussing what was read. They also made references to information learned in class, i.e. Group 1E, while looking for three cabinet Ministers for John A. MacDonald:

"He's from Ontario, so that's good...let's have a lawyer, let's find a lawyer in here."
The student selects and reads the text describing one of the people in contention, then says,
"No, that was his [John A.'s] enemy. Remember when we read the books?

See Appendix C,for excerpts from the transcribed tapes.

Both teachers felt the students benefitted from using the program. One commented that it, "gave them the opportunity to work together in a democratic approach taking into consideration each others reading abilities and having to comprehend what they've read." He felt this was not always possible when using the text in class because of the general reading abilities of the students.

The other teacher, although he felt all the students benefitted from using the program, felt that the brighter ones benefitted more. He could see them getting more involved in it. He mentioned that many of the students as they began to work on the program could see the relation between what was in the program and what they were doing in class. In discussions they would cite information that they had learned from the program. Some of the students, because of their lower reading levels, found that there was too much reading,

but the teacher felt he could solve that by limiting the time they worked at the computer.

Both teachers definitely felt it was worth their time and effort. They also commented that they would like to have devoted more time in preparation. They expressed a desire to continue to use it until they were finished with the unit. One teacher wanted to use it with the next class when the semester changed.

Implementation

The majority of the students agreed that the program was easy to use and to follow. However, compared to previously field tested Bartlett simulations, there was a higher percentage of students who commented negatively. Four students (11%) had reservations about it being easy to use and seven students (19%) thought it hard to follow. Of the seven students commenting on the latter, two also commented on the former. Of those nine students, only one had a grade level reading ability.

A higher percentage of students (28%, ten students) commented on the instructions as not easy. Of the ten, one is also included in the group commenting on the ease of use. Two scenarios in particular were pointed out as hard.

In spite of the fact that the students' median reading level was 7.15, only three students (8%) found the reading not easy. The two males and one female were below the median. Two of the students had not commented on any of the other areas as being not easy.

"United We Stand" is slightly more sophisticated in its design than previous simulations. It has several scenarios which require students to switch from one screen to another for the decision-making process while at the same time requiring them to analyse the information, remember several variables, synthesize the information, make a judgement and then put it into action by moving numbers into position or selecting from a pop-up menu. One scenario in particular in which students seemed to have some difficulty was where students have to help John A. MacDonald choose three people for Cabinet Ministers. They are given the criteria for the selection process in chart form and a list of names from which to choose. When they select the name, a pop-up menu appears, and they can choose to do nothing, read the biography, or appoint the person to the Cabinet. Reading each biography (there are eight), keeping the chart in mind, and coming to a decision demands much of the students. All levels of cognitive thinking are required, recall, comprehension, application, analysis, synthesis and evaluation.

Group 1A (three females) working on this scenario gave some insight into the students' reasoning and the chart's design which adds a confusion factor.

Student 1, has read several biographies aloud and then has gone over the instructions. (other two in group were observed following text and some discussion among the three had ensued previous to this). She then points to the chart:

1. Yes, these are all the...

3. (interrupts) English, French and Irish?

1. Protestant...

3. (interrupting again) He has to be all of those things? You can't be English, French and Irish! (pointing to chart). You can't be Protestant and Catholic at the same time.

2. (joining in and pointing)...or from Ontario and Nova Scotia.

1. (clarifying and pointing) They have to be either of those. They have to be either English, either French, or either Irish. They want... English-speaking Protestant who'll fight the French Canadian...

Looking at the chart at first, they did not relate the fact it was in matrix form. They had someone in the group who clarified it for them.

The other scenario which was problematic is the one in which students have to switch back and forth from a census table to a pie graph. On the first page of the scenario, they have to read the census figures for five groups, English, French, Irish, Scottish and other for each region then order them, i.e. largest, smallest. The pie graph, with percentages and the numbers from 1 to 5 on each slice, is located on the next page. Students then page forward to do the task. The numbers on each slice are not ordinal numbers. They are merely identifiers which the students are to move to the table which is along side the graph. The table, where the numbers are dragged, contains ethnic names from which the census facts on the previous screen can also be accessed. The instructions direct the students to drag the numbers next to the correct group. Reading the census figures, the students have to sequence them. And listening to their discussions, they did -- "French is first, then Irish, then..." Going then to the graph, they would attempt to take the number one as first rather than thinking of the percentage as the one to keep in mind. Again this interplay between the screens requires many thinking skills on the part of students.

Dialogue from group 1E (two males) gives insight into the possible confusion: They have read the census figures and

have gone to the pie chart. Student 1 reads the instructions aloud then says:

> 1. The biggest one...number...French was the largest part.
> 2. Ya, so it's gotta be that one (points to #1).
> 1. No, you go like this...(moves cursor to #2 largest slice with 31.6%)...watch...

Other groups which did not have someone to clarify the issue of ordinal number vs cardinal number often got locked into that thinking pattern and ended up moving the numbers by trial and error.

Another group (2B - three females) working on the pie graph were confused on how to get back to the census. After some discussion and confusion, the observer directed them to read the instructions. Still it wasn't clear and the observer pointed out to reread the first sentence of the instructions. Then it dawned on them how to get back.

One favourite screen was the Federal/Provincial selection screen. Three groups were heard on the tapes commenting: "Oh, this is good", "Oh, I like this guy", and "Holy smoke, look at his head!"

The program was technically reliable during the field

testing. No problems were encountered with the large system network at SDAC. The crash that occurred at the location with five computers was considered to be a hardware problem when someone attempted to get a printout. The machine was rebooted and no further problems occurred.

When students were queried about whether they would want to run the program again, 89% responded yes. When asked why, three responses common to both males and females emerged. They were: it was fun (28% males and 22% males), very interesting way to study history (28% males, 11% females), and more to find out or learn (11% males and 28% females). The males also responded with, "better than class" (17%), and the females with, "Helps to learn more." (11%) and "Doesn't get boring." (11%) One student (female) was heard to comment on the tape, "This is fun. I like this. It's an educational experience!"

Pedagogical Outcomes

Teachers often comment about students disliking history or not liking reading. These two teachers were no exception. They both commented on the low reading levels of their classes and the difficulty in motivating their students to read history. They are acutely aware that reading and

comprehending are keys to success. In the interviews, students mentioned their dislike of reading and of history as well. But they also mentioned how this program made it much more interesting. It was also evident in their behaviour and comments while using the program.

In previous field tests of the Bartlett Saga Series, it was found that students were motivated to read the text. Many of them commented that the Bartletts certainly made history more interesting. The students were observed and their comments duly noted regarding their increased interest in history as a subject and their greater understandings of the people and the times. Much of the students' comprehension was implied in some of their comments and inferred from what they said. However, closer analysis was not carried out to determine what they comprehended.

With this field test, since the basic design of the Bartlett Saga Series had been proven to be quite effective, the focus was changed to look more closely at what students said in discussion groups. Research in interaction analysis gives an indication that dialogue between students could provide clues to determine their comprehension of the material they read and the levels of thinking in which they engage. The ten useable audio tapes of the students' discussions showed

that this is the case. Students were heard reading the text audibly and subvocally -- sometimes with expression -- and invariably engaging each other in discussion about what was read. Excerpts from some of the transcribed dialogues are included in Appendix C.

Students were heard to make clarifying statements to one another indicating comprehension:

> Group 2A (2 males and 2 females) are working on the Eaton's catalogue screen. One of the students is moving the cursor to an item that would appear in catalogue. One of the males says excitedly, "The radio, the radio!" Another voice (one of the females) adds, "Which would NOT have been in the catalogue!"
>
> Group 2B (3 females) working on the use of the Rideau canal. They have accessed and read the definitions of Canada West and the Rideau Canal, have now returned to make a decision. One of them asks, "What do we?" Another responds, "I think the question is what," (she then rereads the leading sentence changing some of the words, but getting the sense), "the first sentence of the report should be...the main business of the Rideau Canal is..." (pause) "I wouldn't say gunboats." (This correct concept was imbedded in the Rideau Canal

definition which implies she read it, comprehended it and applied it to this situation.)

The same group later working through the Cabinet Minister scenario have read about Richard Cartwright. The first one reads, "Richard Cartwright is loyal to the British Crown." Then adds, "So he's Anglican." The second asks, "But is he English?" The first responds, "British Crown!" The second one says, "So he's English." and the third chimes in with, "Richard Cartwright is English."

Group 1E (2 males) working on the scenario where they investigate the logging accident at Chaudiere Falls. The first reads the text and when he gets to the word unemployment, he adds, "I don't know how much they get." They settle for "help from charities" which gives them another alternative scenario of how to spend the $50 a month that the family will get. They settle for "cutting food spending to $35 and all other expenses $25 to $15. The second student's reasoning is, "They're having everything on this, right? But that one. They're skipping clothes. They'd freeze to death!"

Not only has the student comprehended what he read,

processed the information, and made a judgement, but he has reacted affectively.

Speaking of affective domain, another mixed group, Group 1E, (3 males and one female) were working on the scenario on why Sarah Bartlett Jones wouldn't run for political office. The female has read the text aloud and the group, upon her advice, decides to choose, "Women cannot run for office or even vote." The feedback, which the female again reads aloud mentions the fact that women won't get the vote until 1919. One male exclaims, "1919!" A second male says, "Gees, I feel sorry for that woman." The first male sounding dejected responds, "Can't even vote...That's like saying kids can't vote."
The first male felt empathy for the character. But the second has made a creative leap to an analogous relationship; he has seen that women were likened to children.

An example of synthesis, bringing in information from a totally different source, is Group 1A (3 females). They are reading one of the "Ottawa Mirror" articles that randomly appear during the year. This one is about, "Russian Nobleman Count Tolstoy has written a

new novel called War and Peace." She then adds something not in the text, "Okay, the book is like THIS THICK (motioning with her fingers and the others laugh). She then continues reading the text, "This vast epic which took seven years is being hailed as one of the great novels of all time." Again she adds another aside, "And his wife had to write it over seven times, OK?" (laughter). Where these asides came from is debatable. One explanation from one of the observers mentioned the possiblity of it coming from Charlie Brown's Christmas. Wherever it came from, it indicates the student called upon it spontaneously as her previous knowledge matched what she was reading.

The students' dialogue with one another, in spite of their lower reading levels, are rich in humour and in support of one another. When the students are working together, they are not inhibited in their reactions when they read. If they mispronounce words, they correct each other, If they do not comprehend instructions, they are seen explaining to one another. And if they do not know the meanings of words they are often heard attempting an explanation. As in group 2B where one female doesn't know the meaning of "browse."

1.) Late at night you browse? Browse?

2.) Ya, browse through the telegrams that have arrived.

1.) I don't understand this one.

2.) Oh, oh...like you...you know, like study the facts, right? They you browse through the telegrams, the facts. Like you know, you find out the information about it.

The concept of peer tutoring is used as a matter of course when they are grouped properly.

Although the program can also be used individually, it is in groups that students can be seen gaining so much more by their interactions with one another. They can discuss, argue, and communicate their ideas in a non-threatening environment. They are seen to be involved: listening to others' opinions, venturing their own, and expressing their satisfaction or dissatisfaction over the results.

In general, the program is best used with groups. However the audio tapes also brought home the importance of the composition of the group. Teachers need to be "in tune" to the personalities and abilities of the students. Many of the groups even though heard arguing, find constructive ways of

working things out. However, tapes from two groups revealed some personality problems which could have been avoided if the teacher had been aware.

> Group 2F (2 males and 2 females) was one example. The teacher said he grouped them alphabetically. The students also mentioned in the interviews that they had not done any group work in their classroom before. One male and one female had an ongoing feud which kept disrupting the group. Throughout the time, the other two did not support either position. At one point she is trying to convince the group to read, "Just let's look at it. Just put it there and press Action. It just tells you..." She is cut off by the male who presses Action and doesn't bother to access the information to read. A little later on in another scenario, she says, "I'm trying to read." He responds, "You're always reading." Again they get into another round when she wants to read a biography and he rushes through. "If you'd let me read it, I woulda been able to find out." Later on she tries unsuccessfully to get him out of the "drivers" seat. "Let ____ sit here and work this thing."

This student obviously tried working out a difficult situa-

tion, but without support from the other two, she was not able to resolve the conflict. Awareness on the part of the teacher in composition of the group may have made the difference.

From the interviews 94% females and 89% males indicated they found the program interesting. When asked what they found interesting about the program, males and females agreed that making decisions (28% to 17%), making history fun (11% each), and getting a head start on what they were learning in class (11% to 33%) made the program interesting. The females (17%) thought the program was challenging making them think, and the boys (17%) liked going back into history to learn.

When queried about what they learned from using the program, 33% of the females and 17% of the males agreed that they learned more about Confederation. Females (17%) felt they learned more about the people, and males (17%) felt they learned what life was like in the past century.

Students are satisfied with the program. When questioned if they'd make changes in the program males and females agreed that they would leave it as is (83% each). On the 17% who would make changes, there was no agreement on what the changes would be.

OTHER FINDINGS

Along with the regular questions asked of all students, a computer use and attitude survey was included to determine what differences and/or similarities exist between the sexes. Appendix B, p. 3, illustrates the questions asked of both sexes. Tabulation of the data indicated that males have an edge over females in using computers. Not only did more males (44%) than females (28%) have computers at home, they used them more often than females. The median length of time for females using computers was 1.0 years (average 0.8) compared to the males' median of 2.0 and average of 1.2 years. Males' computer use ranked in order was: Drawing (94%), games (77%), word processing (72%), programming (44%), homework (33%), and other (11%). Females' use was: Word processing (67%), games (61%), drawing (56%), programming (28%), homework and other (18% each).

As far as attitudes towards computers go, males and females agreed in two areas: computers are helpful, (100% each) and are easy to use (61% each). They closely agreed that: computers are fun, (100% females to 94% males), smart (94% to 89%), and exciting (83% to 77%).

More males than females considered computers as fast (89% to

67%), creative (89% to 72%), friendly (83% to 67%), not complicated (44% to 22%), and not frightening (100% to 83%). Females qualified their answers more often than males. Rather than answering yes or no, they hedged their answers with such statements as: yes but, not always, only if, etc. The females appear more doubtful.

DISCUSSION OF REVISIONS

Based on the findings, "United We Stand: Confederation" is a program that motivates students to read about history. Even students on the lower reading levels can understand, use, and benefit from its sophisticated design. It involves students in all the domains (cognitive, affective and psychomotor). Students could be seen and heard in discussions involving higher level cognitive skills such as analysis, synthesis and evaluation. This, along with its fitting in well with the history curriculum, makes it a valuable program for the intermediate level student.

Several revisions are seen as necessary for clarity. Based on the students disucssions and the observations, the two screens -- choosing of cabinet ministers and the pie graph -- should be changed slightly.

On the pie graph screen, it would seem to make more sense to have students move the percent rather than the number. Since the students when they look at the census table are obviously engaged in thinking of ordering the ethnic groups, i.e. French is first, etc., it is understandable that they could get locked into that pattern of thinking. Like the optical illusion in which the shape of a vase is embedded in

two faces looking at each other, once you see the vase, it is difficult to see the two faces. Moving the percents would also make more sense because the skill that would be emphasized would be that of percent of the whole and its relationship as the largest number of people to the largest percent or slice of the pie.

On the cabinet minister screen, it would seem to lessen the confusion factor if the criteria chart were reorganized. If the chart had three rows with the criteria across for each cabinet post, then the search for a candidate to match the desirable qualifications would be easier -- especially since they have to read and remember eight different people's qualifications and manipulate the pop-up menus as well.

Both teachers felt the teachers manual was satisfactory and used it more as a resource for themselves. They could make no comment other than they found it useful for their purpose.

RETESTING

The program was well received, and students benefitted from using it. Retesting is not seen as necessary.

Appendix A

Teacher Materials

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Cover Letter	1
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Teacher's Manual	7
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December 16, 1986

Dear Mr ,

Thank you for agreeing to participate in the field test of the ICON version of
The Bartlett Saga Series, Part III: "United We Stand", developed by Interactive Image Technologies Ltd.

This package contains the materials you need for the test:

1. PROGRAMM DISKETTE (United We Stand) - for you to load into the Ambience and preview before the field test.

2. CONFIDENTIALITY AGREEMENT - two copies to sign, one for us and one for your files.

3. TEACHER INSTRUCTIONS - Information to prepare for the field test.

4. SPECIFICATIONS AND LOADING INSTRUCTIONS - to help you load the program into the Ambience.

5. TEACHER DOCUMENTATION - for background and teaching ideas to use with your class.

6. TEACHER/STUDENT BACKGROUND QUESTIONNAIRE - fill this out and have it ready for first day of observations.

Please preview all of these materials carefully.

As we arranged on the phone, I will be in to observe your students using the program on:

MONDAY, JANUARY 12, 1987 from 2:30 to 3:30
TUESDAY, JANUARY 13, 1987 from 2:30 to 3:30
THURSDAY, JANUARY 15, 1987 from 2:30 to 3:30

I will make arrangements for the final interview with you when I come in for the observations. I look forward to working with you. If you have any questions, I can be reached at 361-0333.

Sincerely,

Kathlene R. Willing

cc: , Principal

Confidentiality Agreement

This is to acknowledge that I have received on loan and unprotected copy of

_____

_____

solely for field testing by and a limited number of others

in my school,

I assume responsibility for not duplicating or allowing others to duplicate this software and materials in whole or part. I also agree that my school will not base other work on the contents or format of this software and materials, or in any way disclose confidential information belonging to Interactive Image Technologies/ International Cinemedia Centre Limited.

This material is to be returned to Interactive Image Technologies by _____.

_____

signature

_____

title/school

_____

date

Kindly sign and return one copy to on receipt of the software and materials.

LOADING INSTRUCTIONS

Specifications:

* ICON with 512K
* Colour or Monochrome Monitor
* Lexicon with QNX 2.01 (or higher)
* Ambience 1.2 * Program diskette

Loading Procedure:

1. Log on as site administrator
2. Load the program through the Ambience following the instructions on the screens. It takes about 1500 blocks in the Ambience. Loading time is about 5 to 10 minutes.
3. When finished, log off
4. Access the program through OESS space, to run it.

   Its title is TEST PROGRAM 6

TEACHER INSTRUCTIONS

The following information should help you prepare for the field test. It complies with the Ministry's guidelines set out in "a Formative Evaluation Plan for Exemplary Software".

Prepare Yourself

Familiarize yourself with the ICON, the Ambience and the Program. To do this:

1. Become familiar with the ICON computer, i.e. trackball, keyboard, action key, etc.

2. Become familiar with the Ambience. The Ambience is like an educational "middleman" which organizes how programs are used with the ICON. You have to log-in as a TEACHER to find out about it and how to use it with your class. As a teacher you can log-in as TEACHER or STUDENT. Be aware of the differences. The site administrator should be able to help you.

3. Become familiar with the Program. Preview the program once you have loaded it into the Ambience. To run it log on as a student and access it through OESS. It is Program 6. Explore the different parts of the program including the games.

4. Formulate an idea of how you wish to use it with your students. Plan to use it with your entire class as a teaching unit.

Organize for the Field Test Observations

1. Organize the class into groups for the field test observers.

   The groups can vary in size from one to five students. Although the ideal size is about three, different sized groups are fine. The groups should be made up of a cross-section of students - both males and females of varying abilities and backgrounds. Whom you put together is left to your discretion. You may have more than six groups if your class size is large and you wish all students to use the program; however, ONLY SIX GROUPS WILL BE OBSERVED for the field test.

2. Work out a schedule ahead of time so you will know which students will be observed and when.

3. Approximately one hour per group is needed for each observation. Each hour includes about 10 minutes to interview students.

4. The students do not have to be observed using entire program for each observation.

Prepare Your Students

1. If the field test does not fall into your normal teaching of this period, provide your students with sufficient background information. Do some activities with them to introduce the unit. Use the teacher's manual for ideas to use with the class.

   If the unit has already been taught, review the period and the issues with your students to reinforce your introduction to the program. Do some Preparatory Activities from the Manual or create some of your own. You may want students to work in the groups you have organized for using the program.

2. If students are not already "ICON literate", familiarize them with using the ICON computer before introducing the program.

Use Program in the Classroom

1. Have the students work through the program while the observers are there. Provide adequate time for the observers to interview the students.

Follow-Up

1. Select some of the Extension Activities for use with the class as suggested in the Teacher manual.

Teacher Interview

1. After you have used the program with your students, a half an hour of your time is needed for a teacher interview. This can be done after school, or if you prefer, on a free period. We can arrange this during the observations.

2. Enclosed is an excerpt from the Ministry of Education's, "A Formative Evaluation Plan for Exemplary Software." Read this over before hand, it should help clarify the focus of our interview.

TEACHER/STUDENT BACKGROUND INFORMATION

TEACHER DATA

Name _____

School _____

Size of School (Students and Staff) _____

Size of Class _____

Grade(s) presently teaching _____

taught in past _____

Subject(s) presently teaching _____

taught in past _____

Years of Teaching Experience: _____

Background/Teaching Speciality/Certification

_____

_____

Computer Experience _____

_____

_____

STUDENT DATA

Grade _____

Age Range _____

Socio-Economic Background _____

_____

_____

Level of Knowledge of Subject Matter _____

_____

General Ability _____

_____

Computer Experience _____

_____

Other Comments _____

_____

_____

_____

_____

<01>

INTRODUCTION

The third in The Bartlett Saga series of Canadian historical simulations, "United We Stand: Confederation" recreates the excitement and energy which characterized the years of 1864-1873. The student plays the role of a budding journalist on staff at Widow Bartlett Jones' latest newspaper venture, The Ottawa Mirror. As the student covers various news stories of the period, decisions concerning day-to-day life as well as the larger social, economic and political issues of nation-building will be faced.

<02>

The core of the simulation is a sequence of graphics- and text-based scenarios. From the four stories available for coverage in each of the ten years of the simulation, the student must select three as assignments. This selection takes place from a graphic of the interior of The Ottawa Mirror. To ensure a lively variety of issues, stories are classified into five desks: the National Desk, the Economy, the City Desk, International Affairs and Social Column.

<03>

To assist the decision-making required by the scenarios, a dictionary and atlas can be referred to throughout the simulation. An electronic notepad and a bulletin board allow the user to record observations and share them with others. Two interactive games can be accessed throughout the simulation to provide added challenge, learning and fun.

<04>

As the students travel about British North America, interview politicians and cover local news stories, they will gain an understanding of the political, economic and social dimensions of establishing a nation. The concepts of nationalism and regionalism, the division of federal and provincial powers, and the role of prominent personalities are explored.

The simulation encourages students to interact with history, to perceive the circumstances of people in the past, to appreciate the roots of current conflicts in Canadian federalism, and to compare and contrast the past and the present.

<05>

CURRICULUM OBJECTIVES

"United We Stand: Confederation" is intended to fulfil the following curriculum objectives of an Intermediate level history course:

1. To develop an understanding of the lives of people who settled in Canada: their settlement patterns; their differing problems and hardships; their social and cultural lives.

2. To develop an understanding of the achievement of Confederation: the concerns that existed, the significant events, the influence of various personalities.

<06>

3. To develop an understanding of Canada's post-confederation expansion from sea to sea: railways, people, law.

4. To appreciate that social and economic stress has contributed to change throughout Canadian history.

5. To develop skills, concepts and values as indicated in the aims for the Intermediate Division history program described in the Curriculum Guidelines.

<07>

LEARNING OBJECTIVES

Specific content objectives supported by the simulation include:

1. To describe the British American colonies in the period of 1860-1880: their population growth, geographical expansion, growth of cities and industries.

2. To suggest the factors encouraging the United Canadas and the Maritime colonies towards a confederation.

<08>

3. To suggest the obstacles to federation: the ambitions of Canada West, Canada East's fears of English domination, Maritime pride, self-sufficiency, concern over Canadian domination, geographical barriers and limitations in communications and transportation between the colonies.

4. To survey the steps toward Confederation: the motives of the founding provinces, the roles of individual

Fathers of Confederation; the influence of events in the United States and Britain.

<09>

5. To describe the extension and preservation of the Dominion: the continued doubts in the Maritimes, the railroad and western expansion, the establishment of western provinces in 1870 and 1871.

6. To encourage students to assess the degree to which Confederation confirmed the original hopes that it would benefit all regions and make continued growth possible.

<10>

CLASSROOM USE

The simulation "United We Stand" has been designed to provide students with a personal and adventurous involvement in the events surrounding the making of the Canadian nation. Because of the multitude of issues and personalities involved, introduction to this simulation should ideally follow initial teaching based on the Confederation segment of the curriculum. Students will more quickly assimilate the information provided through the simulation if they have first been introduced to:

1. The time, places, events and major personalities of the Confederation era;

<11>

2. The central issues of Confederation: an intercolonial railway, protectionism against U.S. expansion, division of power and representation in government, East/West hostilities, French/English suspicions;

3. The concurrent issues of nation-building: government economics and trade, regional disparity, cultural differences, transportation.

<12>

In addition to serving as the main learning resource in a unit on Confederation, the simulation may also provide a pleasant wrap-up to the unit, possibly leading to further studies of the effects of Confederation today or a comparison with other countries in the process of nation building, particularly emerging Third World countries.

<13>

The simulation has been designed either for individual users or for groups of students to work through as a team, collaborating on goals and arriving at joint decisions. Field tests of the Bartlett simulations have shown group use to have many positive, interactive opportunities. This kind of group interest can be translated into activities that expand on issues and information provided in the simulation. The teacher may organize debates, discussions, drama workshops, writing assignments and research projects that focus on issues which students may wish to pursue on completion of the simulation.

<14>

EVALUATION

In order to monitor and evaluate the benefits students derive from the simulation, a number of different strategies are available:

(a) Discussions of strategies and decisions can be monitored, both within a group while playing the simulation and between groups after the simulation has been played. Field test situations have revealed an often intense involvement in the scenarios. Discussions of the experience will promote the level of understanding of both content and concepts and provide a context for the development of speaking, listening and reasoning skills.

<15>

(b) Because the simulation covers an extended time period, including the events surrounding Confederation as well as those specifically related to 1867, a prolonged opportunity for learning is provided. The scores recorded offer one indication of progress made. If the simulation is played more than once, the succeeding scores may be compared to evaluate improvement.

(c) All materials in the program can, of course, be used as a basis for traditional testing procedures.

(d) The ancillary activities related to the simulation allow for further evaluation.

<16>

HISTORICAL CONTEXT

Newspaper headlines about federal-provincial disputes or the consequences of the new constitution remind Canadians that Confederation is still a hot political issue. Confederation

is a proud memory, but it is also part of our current politics.

It is important to remember that the Canadians were here before Confederation. All the communities that made up Canada in 1867 had existed for many years, and their societies, economies and ways of life did not dramatically change on July 1.

<17>

Nevertheless, Confederation made a profound change in Canada. A group of small colonies divided by distance, tradition and many rivalries, joined together to create a single nation able to expand its territory and its activities to keep pace with nineteenth and twentieth century growth.

Above all, this nation-building feat was a political achievement. In every region, strong local interests and well-justified doubts made people cautious about the union plan. To overcome those doubts, and create a program of federal union that answered the most pressing criticisms, was a remarkable achievement by the statesmen involved, some of whom vigorously expressed doubts at various stages of the process. Men such as John A. Macdonald, George-Etienne Cartier, George Brown, Charles Tupper and Joseph Howe created a permanent transformation in Canadian affairs.

<18>

A Springboard for Growth

Confederation not only laid the foundation for the political, economic and cultural structure of the new nation, but it also promised an end to deadlock and provided the catalyst for expansion.

By the 1860s almost all parties were frustrated with the status quo. The colonies found their colonial situation increasingly cramped. Canada East and West were linked in a union often more successful in vetoing the aspirations of both than in achieving common goals. The Maritime colonies were finding themselves too small to fund expensive projects like railways and defence.

<19>

These limitations imposed continuing obligations on Great Britain, which wished to reduce its duties in North America. The continuing British presence was viewed with increasing suspicion by the growing United States. Hence, by the 1860s, all sides were looking for a change.

Confederation promised a way out of the deadlock. Each province might still run its own local affairs, but a

national government would take over many of Britain's obligations. A national government would be large enough to fund major national projects in all parts of Canada. Furthermore, Confederation promised westward expansion with the addition of new provinces equal to the original partners.

<20>

Confederation also offered the possibility for the growth of a new nationality. Regional identities would remain strong, but the union provided the basis for forging a Canadian spirit and a Canadian identity.

<21>

Independence and Self-Government

Confederation was one step in a process of increasing self-government for Canadians, a process that extends from the Constitutional Act of 1791 to Patriation of the BNA Act in 1982.

In the early 20th century, many historians downplayed Confederation's contribution to self-government, preferring to emphasize the whole evolutionary process from colony to nation. But in the 1950s Donald Creighton stressed that true independence could not be achieved until the nation was united and able to develop its potential for territorial expansion and economic development. The Centennial in 1967 helped reinforce interest in Confederation, and it has remained at the centre of Canadian political history.

<22>

THE MAJOR BOOKS

Perhaps the most complete single study of Confederation is W.L. Morton's book "The Critical Years." Morton emphasizes that no single factor produced Confederation, his book weaves together many complex issues operating in the years before and after 1867. A livelier book is P.B. Waite's work, "The Life and Times of Confederation," which tries to give a feeling of what Canada was like in 1867. Two books by Donald Creighton, his biography "Macdonald" and "The Road to Confederation," are also valuable.

<23>

PREPARATORY ACTIVITIES

The simulation is best used after students have had some initial exposure to the subject of Confederation. Two preparatory activities are provided below. The first, a quiz, may also prove useful as a pre/post test. The second provides topics for class discussion, group presentations or activity centre projects.

<24>

THEN AND NOW QUIZ

On the eve of Confederation, Canadians still debated many ideas that we take for granted. Rate the degree to which you agree with the following statements (1=strongly disagree; 5=strongly agree). Then rate what opinions you think would have been common in 1865.

1. It is natural that Canada should stretch from one ocean to the other and north to the Arctic.

2. Canada must make its own decisions, with its own government, courts, foreign policies and culture.

<25>

3. Only male adults who own property have a right to vote and participate in politics.

4. Every Canadian should say and believe, "A British subject I was born, a British subject I shall die."

5. Working men and women should have the right to form unions to negotiate their pay and working conditions.

6. It makes perfect sense that you never hear or see any language but English in Toronto.

<26>

THROUGH THE EYES OF 1860s

1. You are a Toronto businessman in 1860. What reasons might you have for wanting Canada to join the United States?

2. You are a French-Canadian in Montreal in 1864. Why might you oppose John A. Macdonald's proposal to have one single strong government ruling all of Canada? Why might you agree with the Montrealer, if you were a Prince Edward Islander?

<27>

3. In 1865, you are a Halifax sea captain. You frequently sail to Boston and New York or to London and Liverpool. What are your impressions of the land west of the Great Lakes? Would they be of interest to you? Why or why not?

4. You and your new spouse both grew up on prosperous farms in southern Ontario. Now that you want to start your own farm, it looks as if all the good land in

Ontario has been taken. Would you be interested in expanding settlement west onto the prairies? Create a conversation between you and your spouse discussing such a move.

<28>

5. In 1867, you have settled in the little town of Victoria in the colony of British Columbia. When an engineer tells you that in ten years there will be a railroad to Montreal, why do you suspect he is a madman?

6. In 1867, you are a student in Montreal. You have never heard any language other than English and French. What kinds of people do you think will immigrate into Canada during your life? Describe the ways in which you might react towards these immigrants.

<29>

EXTENSION ACTIVITIES

Because many of the issues raised in the simulation are value judgements with no obvious "right" answer, the "United We Stand" simulation lends itself to group discussion which can be encouraged and directed by the teacher as part of the teaching process. The discussion that arises as students play the simulation can naturally lead to associated activities.

<30>

LANGUAGE ACTIVITIES

1. Select a news event from the Confederation period and write your own article for The Ottawa Mirror.

2. John A. Macdonald has just become our first Prime Minister. Write a letter to him outlining what you, as a Canadian citizen of 1867, believe should be his top five goals in his first year of office.

3. Write an announcement designed to bring all your neighbours out to celebrate July 1, 1867.

4. Write a speech that John A. Macdonald gives when he comes campaigning in your town in New Brunswick.

<31>

A particularly rich source of research, leading to language experiences, is provided by the Canadian Newspapers on Microfilm project. Most of the early Ontario newspapers have been microfiched, and are now available through the public

library system.

<32>

DRAMA AND DEBATE

1. A group of students choose one province or region in 1868 and create a character from that area. A complete character must be developed - his/her career, family, habits and clothes should all be outlined. Students then present the character's political opinions about the new Confederation. Encourage classroom debate after each presentation.

2. One member of each group impersonates these created characters as a member of the first Canadian parliament. They could debate the resolution: "Moved, that Confederation is a failure and should be abandoned at once."

<33>

SCIENCE AND TECHNOLOGY

Steamships, railroads and telegraphs were all vital parts of Confederation and are frequently referenced in the simulation. Have groups of students investigate various important technologies in use in Canada at Confederation, preparing a scrapbook and class report on how they worked, and a description of their importance in making Canada possible. Or, have a group research a major world scientist alive in 1867 and report on his/her discoveries and their importance, if any, to Canada.

<34>

GEOGRAPHY

Using historical atlases, have students investigate political boundaries of the federal constituency in which your school stands. How much has the constituency changed since 1867: in area, in population, in rural/urban mix; in economic strengths and weaknesses; in ethnic and linguistic variety?

<35>

FIELD TRIPS

an historic site, but it was Confederation tht
created the province ovrmen. Ona fel trp o he eisaue
students should try to discover what elements of
Ontario's practices and customs have existed

unchanged since 1867. The same investigation could be applied to the federal parliament in Ottawa.

<36>

2. Some of the best museums of the Confederation period concern technology. Steam locomotives, canals, pump houses and other mid-nineteenth century machines can be viewed as representative of the Confederation era mentality as much as political institutions or the homes of statesmen.

Listed below are a number of possible field trip sites.

<37>

Alexander Bell Homestead
and Henderson Home
1 Sherwood Drive
Brantford, Ontario
M3T 1W3
(mailing address)

Canadian Forces
Communications and
Electronics Museum
Vimy Barracks
C.F.B., Kingston
Kingston, Ontario
K7L 2Z2
(613) 545-5395

<38>

Hamilton Museum of
Steam and Technology
900 Woodward Ave
Hamilton, Ontario
L8H 7N2
(416) 549-5225

National Museum
of Science and
Technology
1867 St. Laurent Blvd
Ottawa, Ontario
K1A 0M8
(613) 998-4566

<39>

The Pump House Steam Museum
23 Ontario Street
Kingston, Ontario
K7L 2Y2
(613) 546-4696

Thunder Bay Historical
Science Museum
219 South May Street
Thunder Bay, Ontario
(807) 623-0801

<40>

3 Architecture c t yur tuent he haactritic o Goni
architecture, and let them explore h i wa so

For possible field trip ideas, contact your local branch of The Ontario Heritage Foundation. In

addition, many communities now have a local LACAC
(Local Architectural Conservation Advisory Committee)

NOTEPADS

t be

read or eiedb h tahr.

SCORES

ompleted game, use the Teacher Ambience o cesseah

student's personal space.

TEACHER INTERVIEW QUESTIONS

1. What is your overall impression of UNITED WE STAND?
2. How would you describe your students' reactions to the program?
3. How do you feel your students benefitted?
4 What type of students benefited more than others?
5 Was the program easy for students to use?
6. What were some of the difficulties students encountered?
7. Was the lesson suitable for computer use?
8. Could it have been presented more effectively or efficiently by another means of instruction?
9. Did the lesson accomplish the purposes for which it was designed?
10. Were you satisfied with the instructional design of the program?
11. What changes would you make in the design of the program?
12. How do you see the program fitting into existing curriculum?
13. Were you satisfied with the contents of the program? (i.e. accuracy, organization, et.)
14. Was it appropriate to students and curriculum?
15. Were there any offensive parts, sex/race/ethnic stereotyping?
16. Was the program worth your time and effort?
17. How do you see this fitting in with your future plans?
18. Describe how you used the teacher's manual. What worked, what didn't, what would you change?
19. Technical problems?

Appendix B

Observer Materials

Contents

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Group Observation Form	1
Individual Observation Form	3

GROUP OBSERVATION INFORMATION -1

SOFTWARE _____

OBSERVER NAME _____ DATE _____

SCHOOL _____ GRADE _____

STUDENT GROUP:

OF MALES _____ # OF FEMALES _____

NAME AGE COMMENT

1. _____

2. _____

3. _____

4. _____

OBSERVATION OF GROUP (fill in after observation)

How did the group work together? Was there a natural leader or did group share responsibilities? Was the leader male or female? Can you assess reason for leadership role? (more experience, more interest, etc) What was teacher's interaction? Did Male or female appear more active in using computer, more impatient, frustrated, comfortable, confident with computer, spent more time working with computer? Why?

INDIVIDUAL STUDENT QUESTIONNAIRE -1

STUDENT INFORMATION: Male Female

School _____ grade age date

I. COMPUTER USE Hom Sch

1. Do you use a computer at home/school?

2. How long have you used computers?

3. Do you use it to:
   play games?
   do homework?
   word processing?
   draw pictures?
   write programs?
   other? _____

II. COMPUTER ATTITUDES yes no

1. Do you like computers?

   Why? _____

2. Do you think computers are:
   Helpful
   Friendly
   Complicated
   Easy to Use
   Exciting
   Smart
   Frightening
   Fast
   Creative
   Fun

Individual Student Questionnaire -2-

III. Software Yes No

Program

1. Did you find the program interesting?

   Why? Why not?

2. What did you like best? Why?

3. What did you like least? Why?

4. Did you learn anything from using program?

   What?

5. Would you use the program again? Why/not?

6. Did you like:
   The graphics, etc.
   The text, reading passages,etc.

7. Was the program easy to:
   Use
   Follow
   Remember instructions
   Read (reading level)

8. Would you change anything? What/Why?

Appendix C

Excerpts From Transcribed Tapes

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Group 2F	18

EXCERPTS FROM TRANSCRIBED TAPES
STUDENTS' DISCUSSIONS
UNITED WE STAND: CONFEDERATION

GROUP 1A -- 3 FEMALES

The group is working on the scenario to determine two countries in the British empire. One of the hints is Taj Mahal:

1.) Taj Mahal, Taj Mahal. Where's the Taj Mahal? I'm thinking now, think, think, think. Gees!

2.) mmmmm...

1.) India!

2.) No.

3.) uh uh

1.) It's not in Russia.

2.) Brazil!

1.) Brazil?

3.) Not China.

1.) Brazil's cold isn't it?

3.) It's HOT man! Ya, it's in...South America! undalay, undalay! (Group laughs and someone selects Brazil.)

1.) India, India! Would you just listen to me? I told you it was India!

The group is reading one of the Ottawa Mirror screens that

randomly come up during each year. Student # 3 is reading the text quite audibly and with expression:

> Russian Nobleman Count Tolstoy has written a new novel called, "War and Peace"... (she adds as an aside) -- Okay, the book is like THIS THICK! (she makes a motion indicating the thickness and then continues reading)... This vast epic which took 7 years is being hailed as one of the great novels of all time... (once again she says in an aside) -- and his wife had to write it over 7 times. Okay?

On the cabinet minister screen they are stuck for whom to choose:

3.) Oh, oh, go over to Charles Tupper. I have an idea!

At another point in the discussion, they are reading one of the candidates' biography:

1.) No, he doesn't have any background.

2.) He would be good.

3.) No, you can't pick a "Gweeb." You have to pick somebody that knows what they're doing.

1.) A GWEEB? (laughter)

While reading the biographies, #1 reads about Richard Cartwright and comments:

1.) I read about this last night. Did a project on it.

They are trying to decide which house in Sackville to interview for the peoples' opinions on Confederation.

1.) Let's try the small people.

2.) Small people? I want the rich people.

3.) Who cares what the rich people think?

1.) (Moves cursor and selects a house)...This is the house I like. (She reads the feedback and it is positive).

All) All right!

1.) I told you my little house was good.

3.) (Mockingly)...This house has a little gate. I've always wanted a white picket fence! (laughter).

At another point #3 decides she wants to look at one of the houses and the other two balk. She justifies it with:

3.) This one isn't for points, it's just to understand what we're doing.

They are reading the alternatives Jacques has in the Fenian invasion:

3.) The man is 52!

1.) My grandfather's 81 and he still jogs!

They laugh and a selection is made, but it wasn't good:

3.) Minus, minus, minus.

1.) So, he's not as healthy as my grandfather!

They are reading and examining the census figures before going to a pie graph which is on the next screen:

2.) So, this is the most, this is the second...

3.) First, second, third...(She points to the figures).

1.) These two are...

3.) (Interrupting)...fourth and fifth.

They go to the next screen, the pie graph and #2 reads the instructions.

3.) (Corrects and repeats what #2 has just read)...It says...

2.) Drag the number. Did we memorize the names?

1.) (After a pause)...ah, this one...take it to...

3.) 16%

2.) That's the second largest...

The following are some of the positive comments heard throughout the tape:

I just love the social news.

She's right, Mrs. Bartlett Jones is right.

Good choice, we gained some.

Oh good, we gained them all back.

Oh good, International Affairs. This is my favourite one.

This is fun, I like this.

This is an educational experience.

GROUP 1B -- 2 FEMALES

These two are working on which way to travel from Ottawa to Charlottetown to cover the conference:

1.) We read about this in class today.

2.) ya...(reading subvocally)...Maritimes...

1.) There wasn't anything in there about that, was there?

2.) I don't think so.

1.) Let's try this one...(selects and reads)...do nothing, check schedule, make reservations...(she pauses then says)...check schedule.

They do this with both options and continue:

1.) Wait a minute, let's go back to the top one...(they select)...go to check schedule again...(subvocal reading then)...read the second one.

2.) The second?

1.) Ya, see like this one just goes...Ottawa to Montreal. Did it say on the other one Montreal to Charlottetown?

2.) check it again.

They start reading the text together and #1 finishes:

1.) Montreal to Albany, Albany to Boston, Boston to St. Johns, St. Johns to ...Holy smokies! (she pauses)... Okay let's go to St. Lawrence River.

2.) Okay, make reservations?

1.) (After comparing the two she realizes that St. Lawrence River is the quickest and says:) Ya.

They are reading the alternatives for Jacques in the Fenian invasion:

1.) Rush off to fight?

2.) At 52? I don't think so.

1.) (Highlights text that reads, rush off to fight)...This one volunteer.

2.) At 52! What's he gonna do? He's 52!

They are trying to decide what the judge should do about Billy who was arrested for stealing food. The one has mentioned the second option, that of putting him in the Kingston penitentary:

1.) Ten years in the penitentary! Not really.

2.) The penitentary is...

1.) Prison, man!

The following are spontaneous positive comments made while

running the program:

Okay, we're on a roll here! Do this more often, eh?

Holy smoke, look at his head!

Let's go to the economy, I love that!

Oh, that's cute. Look at the rapids.

GROUP 1C -- 3 MALES

These three are viewing the graphics of where to locate Jacque's mill. One of them asks:

1.) Where do you think the best place to put the mill?

2.) (Assessing the situation)...Right by the rapids.

1.) (Points)...Here?

2.) (Clarifies his reasoning further)...I wouldn't put it beside the houses...(points)...because it would block off the houses.

They are working on the pie graph and have read the census and are verbally putting them in order:

2.) French, okay -- it goes French...

3.) (Intervenes pointing)...this is...

2.) (Continues)...French, Irish, English, Scots and other.

1.) (Agrees)...Okay, French, Irish, English, Scots, other. French... (Moves cursor and presses Action)...Hey, What's goin' on ?

3.) (Explains)...We go to the number.

1.) French

3.) No, that's French.

1.) (insistent) French is that one.

2.) No, the BIGGER slice of the pie!

Spontaneous comment after reading about Viscount Monck.

That's cool. That's okay, he's so fancy.

GROUP 1D -- 1 FEMALE AND 1 MALE

This tape had too much background and machinery noise. The voices are indistinguishable.

GROUP 1E -- 2 MALES

These two are looking for three men to be cabinet ministers, they read a biography of one of the candidates and refer to the criteria chart:

2.) He's from Ontario, so that's good...Let's have a lawyer, let's find a lawyer in here...(Selects another biography to read)...No, that was his [John A's] enemy. Remember when we read the books?

It is the end of the year and the Life Factor scores are on the screen. One of the pair wonders aloud:

1.) (Pointing to one of the symbols)...What is that?

2.) I can't remember. Is there a way we can find out what they mean?

1.) You go back to...

2.) (Interrupts)...Oh ya, I remember. Don't worry, right here. Ya, career...(Highlights the symbol and reads the text then says)... Everytime I guess right, we get a career point. We get one of these.

They are having to make choices on spending for a family whose father has had an accident at Chaudiere Falls:

1) Maybe this one 'cause they're having everything on this, right? But that one...(points to other alternative to spend the same amount on food)...they're skipping clothes. They'd freeze to death! It's the best thing to do.

At another scenario, they had to choose two correct alternatives before going to the next screen. After having had some problems, one of them explains:

> See, you had to get two of them...two Good ones, before you could go on to the next page.

One of them has just read the text and tells his partner:

Read that, it's important!

Again one of them after reading the instructions about the telegram says:

1.) We'll go to every one, so we know what they mean.

2.) (questioning)...don't we have to pick one?

1.) Hold on, just...see...once we look at all of them, we can go on to the next page.

GROUP 1F -- 2 MALES

This tape is also not distinguisable because of the machinery and background noises.

GROUP 2A -- 2 FEMALES AND 2 MALES

On the Eaton Catalogue screen, the are discussing what would NOT be in it:

4.) The radios, the radios!

2.) Which would NOT have been...

1.) oh.

2.) Not has.

1.) Oh, I didn't know, I'm sorry...Okay, you tell me what the next one is.

2.) Okay, this one here...this one.

3.) That's a coffee grinder!

1.) Sorry about that, what's this?

3.) a cigarette

4.) No that's handcuffs.

2.) No, that's the butter thing. They had those things. Those are old things. They don't use them to make butter [now], do they?

1.) Okay, let's see..(selects)...Hahaha..look at that genius!

Several clarifying questions were heard:

Don't you think that's impossible?

He needs the books, doesn't he?

GROUP 2B -- 3 FEMALES

This group is working on the topic sentence to put into the newspaper on the main business of the Rideau Canal. They have already looked up the definition of the Rideau Canal:

1.) (She has read the alternatives and asks)...Wanna look up Canada West?...(One of them reads the definition)... I would say...

3.) What do we do?

1.) I think the question is what should the first sentence be the main business of the Rideau Canal is? I

wouldn't say gunboats.

The group is working on the Cabinet Minister selection and one of them is reading the biography on Richard Cartwright.

1.) Cartwright is loyal to the British Crown, so he's Anglican.

2.) But is he English?

1.) British Crown!

2.) So he's English.

3.) Richard Cartwright is English.

They are working on the scenario where they have to browse through the telegrams before writing up a story. One of them questions what they have to do:

1.) Late at night you browse? Browse?

2.) Ya, browse through the telegrams that have arrived.

1.) I don't understand this one.

2.) Oh, oh...like you...you know, like study the facts, right? Then you browse through the telegram, the facts. Like you know, you find out the information about it.

On the pie graph screen, they are discussing what to do after returning once to the census screen:

1.) See, English is...(adds up numbers)...go to Irish then...

2.) But this is larger, see?

1.) Ah, you don't understand. You're supposed to look at the percentage. See, 31.6%. This...(Pointing to the number on the pie slice)...is just a number. You're supposed to put it there.

Some comments which bring in other experiences as they are looking at a graphics screen of three men:

1.) That looks like a police officer.

2.) Ya, that looks like a scrooge.

Spontaneous comment about their progress:

Wow, we're smart!

GROUP 2C -- 3 FEMALES AND 1 MALE

They are looking at the graphics screen of the flags, and the male implies through his comment that one flag wouldn't be possible:

The Canadian Flag is only something like 27 or something years old.

On the tool graphics screen, two of the females are trying

to figure what one of the tools is. The other decides to access information from the database:

1.) I want to see what it is...you know...cut things...cut things...(reads).

2.) Its either wooden or I mean...leather handle. Okay... (continues reading)...for cutting and shaping materials such as stone or wood...(interrupts with)...I Think this is it...(continues to read)...It needs a strong sharp blade...(changes mind)...This is not what you need.

1.) (begins to read)...often struck...

2.) (picks up the reading again)...and is often struck with a hammer to chip, to chip...made with stone or horn...

1.) No this is the wooden handle.

2.) Do you think this is the...I think this is it.

1.) That's not a wooden handle, this is the wooden handle.

2.) Are you sure?

1.) Absolutely!

GROUP 2D -- 1 FEMALE AND 2 MALES

They start off very democratically with:

2.) Do it this way so each of us gets a turn.

1.) I think...(reads)...accept J. A. MacDonald even though he's older...(Indicates)...Number one.

2.) Ya, she should.

1.) If I was in her place, I would...(selects)

3.) Ahhh, it was right!

They are trying to decide which mode of transportation to take and the text is in French. The female reads and translates as she goes:

1.) C'est beaucoup plus vite de passer par...okay, many times...it is better...to take...the...boat. The train... ca marche...tres...

2.) We could...

3.) Travel by boat.

They are reading information on Cartier for decision on Cabinet Minister screen:

3.) Cartier, it'll say a bit about him...(reading)... He was a lawyer, politician and a father of Confederation. Leader of French Canada...

1.) And a close associate of...

3.) Okay, try to remember all of that, okay?

1.) Okay, lawyer, politician, father...

2.) leader and close friend to John A...

1.) Allay to John A...

3.) (Correcting the pronunciation) Ally!

While working on the Fenian invasion scenario, they make several references to what they have learned in class:

3.) (Pointing to the word, FENIAN)...Wanna go here?

1.) Ya, let's check it out.

2.) Check it out...

1.) Because it could be useful later, right?

3.) I forget that word...(pronounces it Fenines)...we just did it today in History.

1.) Fenines?

3.) I think.

1.) Fenians!

1.) (Later she is reading a telegram about the Fenians)... attacking Britain ...Remember we did this is class today. They wanted to take on Canada because it was part...it was...British.

One of them asks a clarifying question before moving on:

1.) We know what a lumber mill is don't we?

2.) Ya, we know what a lumber mill is.

3.) Where they make wood.

Two spontaneous positive comments while working:

I like this tough graph.

Good, that was easy. I love that.

GROUP 2E -- 1 FEMALE AND 3 MALES

They have selected the fact that Widow Bartlett Jones won't run for political office because she is a woman and women cannot run for political office or vote:

1.) (Reading feedback)...Women will not get the vote until 1919.

2.) 1919!

3.) Gees, I feel sorry for that woman.

2.) (Dejectedly)...can't even vote...That's like saying kids can't vote.

They have accessed the Atlas and are comparing the map of 1871 to several others:

1.) We know where Rupert's land is, eh? It's half of Quebec

and mostly all of...

3.) 1871, right? Look at it. This is all the NorthWest Territories. There's no more Rupert's Land and this is British Columbia and this is Manitoba. This is not even a quarter of Quebec.

One of them questions the use of the work Chancellor:

3.) Chancellor Bismarck...Chancellor? Isn't it supposed to be Councillor?

1.) Chancellor!

Someone asks a clarifying question:

What do you think is most likely?

GROUP 1F -- 2 FEMALES AND 2 MALES

This group was disrupted constantly by an ongoing feud between one female and a male. She wanted to be able to read. He controlled the trackball and Action key. The other two in the group could not be heard distinctly. Although there was too much crosstalk to make out what was being said, it was apparent that a squabble between the two was taking place.

END

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